



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,696	02/15/2005	Kazuhisa Yasui	265994US2PCT	1736
22850 7590 06/13/2007 OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER NGUYEN, SANG H	
			ART UNIT 2886	PAPER NUMBER
			NOTIFICATION DATE 06/13/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary

Application No.

10/524,696

Applicant(s)

YASUI ET AL.

Examiner

Sang Nguyen

Art Unit

2886

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3/15/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicant's response to amendment filed on 03/15/07 has been entered. It is noted that the application contains claims 1-3 by the amendment on 03/15/07.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 03/15/07 has been entered. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Fantone et al (U.S. Patent No. 6,226,081).

Regarding claims 1 and 3; Fantone et al discloses a method and apparatus for measuring a particle diameter of foam on a liquid, characterized by comprising:

a laser light source (424, 426 of figure 11) that irradiates a laser linear beam (col.5 lines 55-59; col.12 lines 13-18 in [168 of figure 5]; and col.14 line 44) onto a surface of a foam layer (figure 6 and col.13 lines 10-11) created on malt alcoholic drink (e.g., a liquid such as beer or soda and col.6 lines 30-35);

an imaging device (i.e., a linear CCD of radiation detectors or camera [432 of figure 11)) for capturing images a laser linear (BC of figures 6 and 7) reflected on the surface of the foam layer (figure 6 and col.13 lines 10-11) to obtain an image of the laser line (BC of figures 7-9); and

a calculating device (i.e., a computer system [80 of figure 1]) that obtains edge information of the laser line (col.12 lines 50-58) from the image of the laser line (BC figures 6-9) to calculate a particle diameter of foam (col.6 lines 23-37; col.7 lines 42-67; and col.11 lines 10-30) in the foam layer (figure 6) based on the edge information (col.12 line13 to col.13 line65). See figures 1-29.

U.S. Patent May 1, 2001 Sheet 6 of 26 US 6,226,081 B1

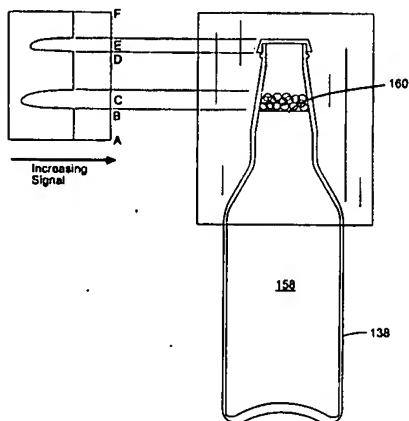


FIG. 6

U.S. Patent May 1, 2001 Sheet 7 of 26 US 6,226,081 B1

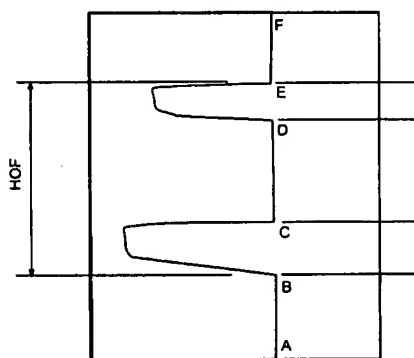


FIG. 7

Claim Rejections - 35 USC § 103

Art Unit: 2886

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fantone et al (U.S. Patent No. 6,226,081) in view of Klotzsch et al (U.S. Patent No. 5,536,937).

Regarding claim 2; Fantone et al discloses all of features of claimed invention except for the laser beam is obliquely irradiated onto the surface of the foam layer, and the laser is imaged by the foam detector from a position in a direction perpendicular to the surface of the foam layer. However, Klotzsch et al teaches that it is known in the art to provide the laser beam (12 of figure 1) is obliquely (figure 1) irradiated onto the surface of the foam layer (30 of figure 1), and the laser is imaged by the foam detector (32 of figure 1) from a position in a direction perpendicular to the surface of the foam layer (30 of figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine method and apparatus of Fantone et al

Art Unit: 2886

with the laser beam is obliquely irradiated onto the surface of the foam layer, and the laser is imaged from a position in a direction perpendicular to the surface of the foam layer as taught by Klotzsch et al for the purpose of analyzing the image from the video camera and generating numerical data quantifying the visually perceptible characteristics of the foam.

Response to Arguments

Applicant's arguments, see remarks pages 6-7, filed on 3/15/07, with respect to the rejection(s) of claim(s) 1-3 under Klotzsch et al and Constant et al have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of Fantone et al (U.S. Patent No. 6,266,081 has been submitted PTO 982 on 12/15/06.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Juvinal et al (6025909) discloses container sealing surface area inspection


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Nguyen whose telephone number is (571) 272-2425. The examiner can normally be reached on 9:30 am to 7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tarifu Chowdhury can be reached on (571) 272-2800 ext. 86. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2886

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

June 7, 2007


Sang H. Nguyen
Primary Patent Examiner
Art Unit 2877